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AUTHOR Gandara, Patricia; Fish, Judy
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ABSTRACT

Outcomes of the Orchard Plan, an experiment designed to reorganize funding to support new models of instructional delivery, are described in this report. Basic elements of the program include an extended school calendar; a reorganization of categorical funding into intersession enrichment courses for at-risk students; a reduction in class size through a rotating, tracking system; the opportunity for extended teachers' contracts; restructuring of curriculum units; and voluntary participation and shared decision making. Evaluation of the four participating schools' first-year outcomes indicates overall success. Results include a high level of parent and teacher satisfaction; maintenance of overall achievement scores, with enhancement in some areas; increased school capacity; increased teacher salaries; and a small reduction in class size. Although it is difficult to directly attribute increased academic achievement to a particular intervention, teachers at each school reported a decrease in students' negative behaviors. Conclusions point to the feasibility of extended-year programs; the need for diverse sources of program support; the benefits of offering teacher contract options; the usefulness of extended-year programs to reduce class size without additional cost; and the value of experimentation to generate positive classroom attitudes. Limitations in implementing such a program involve differences among individual schools in budgeting, space, and planning capacities. Four tables are included. (12 references) (LMI)

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AN EXPERIMENT IN RESTRUCTURING K-6 EDUCATION: THE ORCHARD PLAN

Patricia Gandara
University of California, Davis

Judy Fish
Palmdale Unified School District

California, like several other sunbelt states, is facing serious challenges to its educational system. Schools are overcrowded, class sizes are extremely large (averaging over 30 students to a class), and a significant portion (estimated at 30%) of the students continue to show a decline in test scores and other educational indicators relative to the tota' school population (Brown & Haycock, 1984; PACE, 1990). Moreover, many large school districts have been wracked in recent years by teacher strikes for higher pay and better working conditions.

California has attempted to address some of these problems through numerous "categorical programs", that is, specialized funding for children with particular educational handicaps. Unfortunately, the rigid 180 day school calendar and the lack of adequate school facilities generally result in such funds being spent to supplant regular education rather than augmenting it. Up to half of the children in the public schools in California are potentially eligible for some kind of special aid because of economic disadvantage, language differences, learning problems, or even "giftedness". The typical way in which this aid is administered is by pulling the child out of regular instruction in order to receive the specialized instruction. In order to get one thing, the child is required to give up another, and is segregated from his or her peers in the process. Research has demonstrated that such programming is often not only ineffective, but occasionally harmful to educationally disadvantaged children (Kimbrough & Hill, 1981).

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It was in this context that the Orchard Plan experiment was designed to attempt to reorganize the same funding to support new models of instructional delivery. The experiment encourages teachers to use more cooperative learning strategies, by continually grouping and regrouping into heterogeneous ablity groups. It requires a closer monitoring of student performance in order to facilitate new groupings every three weeks. It also provides a qualitatively different educational experience through experimental intersession programs that are designed to augment the regular curriculum.

An additional component of the program focuses on teacher satisfaction and productivity. Teachers are given the opportunity to accept 11 month contracts, which in California can convert to annual pay as high as $64,000. Teachers retain traditional Winter and Spring breaks, plus a shortened summer vacation of three and one half weeks. The working assumption is that a well-compensated teacher will feel better about him/herself and bring an increased sense of self-efficacy into the classroom.

The basic elements of the experiment include:

(1) an extended year calendar in which approximately 223 days are available for instruction

(2) a reorganization of categorical funding (Chapter One, Special Education, etc.)to shift these funds into intersession enrichment courses, thereby providing extra days of instruction to "at risk" students

(3) a reduction in class size by at least 2-3 students per classroom, through a rotating system of classroom attendance by five "tracks" of students (one track is always on vacation)

(4) the opportunity for teachers to extend the length of their contracts by 20%, resulting in 20% higher

pay (and 20% fewer teachers on campus)

(5) the restructuring of the curriculum into smaller units with built-in review and more careful monitoring of students

(6) voluntary participation on the part of schools, teachers, and families with all having a stake in the planning of the program.

Four schools in different parts of the state opted to participate in the project. Each school was provided a stipend in its first year (1988-89) for the sole purpose of planning its program. Staff could use the money in any way they chose. They have also received stipends in the subsequent two years to aid them in the transition (e.g., setting up a data collection system, computerizing curricula).

The Intervention

Each school operates on a 60-15 calendar, meaning that students attend school for 60 days, then vacation for 15. This cycle repeats three times during the school year. The research suggests that the shortened vacations should have a positive effect on student achievement, particularly for the educationally disadvantaged students. It is hypothesized that this results from a reduction in learning loss over the shorter breaks as well as a reduction in the amount of time teachers need to review already taught material (Quinlan, 1987; Handleman & Harris, 1984; New York Department of Education, 1978).

Although five heterogeneous tracks of students are assigned to a teacher and all will eventually have contact with each other, only four tracks are present at any one time. This configuration results in about a 3 student reduction in class size. (E.g., while teachers may have once had 31 students in their class, they now have 35 on their roster, but only 28 in class at any one time.) It also results in a constantly changing dynamic in the

classroom. Evidence is accumulating that more positive roles are created for children in these classrooms.

During the time that children leave the regular classroom for vacations, they may return to the school for special educational programming intended to bolster, augment, or enrich the regular curriculum. If a child is falling behind academically, he may work with an academic specialist in a small group setting; if the child has been identified as gifted, she may work on some curricular enrichment project. Occasionally groups will be mixed for a special project like kite-making or mural painting. In this way, children may be grouped heterogeneously in the classroom, but also have several oppportunities during the school year to focus on special programming designed to meet their particular needs. Studies of time on task have suggested that such an extension of learning time should have a positive effect on student achievement (Chase & Kane, 1983).

Another element of the intervention involves teachers, the way they structure teaching, and the way they are compensated for their work. A number of studies have concluded that cooperative teaching strategies can have a positive effect on student learning (Slavin, 1983; Oakes, 1985). The Orchard experiment involves structural incentives for teachers to team-teach and to group their students into cooperative learning groups. With tracks moving in and out of the classroom every three weeks, whole group instruction loses its attractiveness. Instead, to accomodate the rotating tracks, the curriculum is planned ahead in three or six week blocks for smaller subgroups of children. This ensures a carefully planned curriculum and well-paced instructional delivery.

Studies of teacher attrition rates (Darling-Hammond, 1984; Cagampang, et al.,1985) suggest that as many as half the teachers in the teaching force quit teaching within any seven year period. Desire for a higher salary is one of the

primary reasons given (Darling-Hammond, 1984) The Orchard experiment allows teachers to be paid 20 percent more than their previous salaries in exchange for a lengthened contract. In most cases, this represents a salary which is very competitive in the job market. Of course, not all teachers wish to extend their teaching contracts, and this should be an option.

The Schools

Tweeter

Tweeter is a small rural school serving approximately 245 children in grades K-6 (one class at each grade level). It is located in an economically depressed area and 90 percent of the students are on AFDC and/or Free Lunch. Approximately 30 percent of the children are Hmong; about half of the students are minorities. At least 10 percent of the children have significantly limited English skills. The school loses about one-third of its population each year to transciency. The school opted to participate in the experiment because it offered the possibility of providing services to children and holding some of the students who were having to be bussed out to other schools because of overcrowding.

The small staff, with the exception of one teacher, came to teach at Tweeter when the project began in 1988. Perhaps in part because of this, there is a strong sense of cohesion among teaching staff.

Much of the program focus at Tweeter has been on providing extra time at school for the Hmong and limited English pupils. Intersessions have consisted of various projects and activities such as kite-making, skills review and field trips. Intersessions have not been developed to the level that the staff would like, however, due to space limitations, resource limitations, and unavailability of persons to coordinate the program. In part, the intersession has consisted of allowing children to return to

school for informal instruction and as "auditors" in the regular classroom. A number of the children have, in fact, been at school for more than 220 days (as opposed to 180) in the previous year. Approximately 25 percent of the children in grades 1-6 have attended intersession activities.

Palm Avenue School

Palm Avenue is a large alternatiave school (1100 students in K-8; 32 classroom teachers) in a lower middle class suburb of Los Angeles. It exists in a rapidly growing community where overcrowding of facilities has become an acute problem. This, coupled with the fact that the principal has a Ph.D. and strong research interests, was the impetus for participating in the experiment. The majority of the students in the school are Anglo-American and the stability of the student population is quite high, with 90% remaining from one year to the next. While the school, as a whole, is not "at risk" in the sense that some of the other Orchard schools are, 150 students have been identified as Chapter One (functioning below the 35th percentile on standardized tests).

Of all the schools, Palm Avenue has been the most effective in implementing all aspects of the Orchard model. School personnel report that grade level teacher teams have developed a variety of ways to groups students across and within classes for instruction, including grouping by track, curricular units, skills, subject area and heterogeneos cooperative learning groups. Teachers provide students and parents with reports every three weeks.

Intersessions are offered to all students with a special focus on attracting students with special needs. Students have the option of returning to school, or other locations, for scheduled, full-day enrichment and extension activities, remediation, field trips, and to serve as tutors across the campus. Overall, approximately 70% of the students have returned for some form of intersession; 30% of Chapter One students have returned for extra help and 50%

have attended scheduled enrichment or extension activities. The principal also reports an increasing number of requests from teachers to keep particular students for "re-teaching" during the children's break. Because the percentage of Chapter One and Special Education students who avail themselves of the opportunity for intersession is lower than the percentage of regular education students who attend the program, teachers have expressed a concern about curtailing regular session pull-outs for these targetted children.

Brady School

Brady School is located in a largely working class suburb of Southern California and has a population of about 600 students, 65% of which are minorities; most of these are Hispanics. Between one-fifth and one-quarter of the school population is Limited English Speaking. Nearly 50% are on the free or reduced fee lunch program. The official stability rate of students is about 75% (June to September), however there is considerable movement of children in and out school throughout the year.

The school had already been on a single track year-round calendar when the opportunity arose to participate in the experiment. Because of increasing over-crowding the district was faced with converting the school to a multiple track program. The staff were unhappy with the idea of disruption caused by the constant moving of teachers from classroom to classroom and saw the Orchard experiment as a way to convert to multi-track operation without the attendant problems created by some other year round schedules. Aditionally, a number of teachers who had reached the top of their pay scales were attracted to the opportunity to increase the length of their contracts and thereby increase their salaries. The average years of experience of the teachers at Brady School is almost twice that of the other schools.

Brady School has had uneven success in operating its intersession program. 44% of the students in grades 1-6

enrolled in intersession courses (with an overall 80% attendance rate) during the first year. Intersessions consisted of math and reading reinforcement, art, literature, physical education and computer activities. Two young, certificated teachers were hired to conduct the intersession and both parents and staff reported high satisfaction with the program. This year, the principal reports that the intersessions, under the direction of two different teachers (the previous teachers were hired into full-time teaching positions) are not as exciting to the children and there is less enthusiasm about the program.

Hiawatha School

Hiawatha School is located in a working-class Southern California suburb not far from the Mexican border. It enrolls approximately 820 children and like Tweeter, it loses about one-third of its students each year. 51% are on the free or reduced fee lunch program. Almost two-thirds of the school is Anglo-American, with the largest minority group being Hispanics (18%). About 15% of the students are Limited English Speakers.

Hiawatha School has been a Model Education Center for its district for a number of years. This means that it has established an ongoing relationship with a nearby university to train its teachers and, in turn, receives regular inservice instruction from the university. When it became evident that Hiawatha would have to convert to a year-round or extended year calendar in order to accomodate its burgeoning population, the relationship with the university was threatened because of incompatibility of calendars and the fact that the teachers would have had to leave the campus several times during the year, making consistent student teacher supervision impossible. The Orchard experiment offered the possibility of extending the calendar, and hence the capacity of the school, without disrupting the teaching year. This was the greatest impetus for the school to decide to participate in the experiment.

Teachers at Hiawatha School team across grade levels as well as within grades, and students spend a major portion of their time in heterogeneously-formed cooperative learning groups. Class size was lowered significantly as a result of adopting the Orchard Plan, and the class sizes at Hiawatha are smaller than at any of the other experimental schools (many classrooms operated last year with about 24 students). The school, however, has not been very successful in implementing the intersession program. Because of space limitations, the intersession program was offered at another campus where transportation problems precluded most children from attending. The school has recently acquired a new portable and is instituting intersession on-campus this spring.

Evaluation Criteria

Evaluation criteria were established at the outset of the experiment. In order to consider the various aspects of the experiment "successful", they would have to meet specific criteria for which data would be collected. These luded:

1. Objective: "At risk" pupils should improve academic performance
   Criterion: Pupils targetted for intersession instruction (the school's "at-risk" population) should show significantly greater academic improvement than a comparable group of students in the same district who have not received such intervention.
2. Objective: Average achievement for all pupils in the Orchard school should equal or exceed that of other pupils with similar characteristics
   Criterion: Pupils in the Orchard school should do at least as well on standardized tests as pupils in another comparable school in the same district which is not in the experiment.
3. Objective: Pupil and teacher absentee rates should

not exceed the level achieved prior to the ment

4. Objective: Parents and teachers should express satisfaction with the program
   Criterion: At least 60% of parents and teachers responding to polls made available to all, should report satisfaction with program and desire to continue. Information would also be gathered on how to improve the program.
5. Objective: Increase school capacity
   Criterion: School capacity should increase by at least 18% in high growth areas; 10% in low growth areas.
6. Objective: Increase teacher salaries
   Criterion: Teacher salaries should increase by at least 20% annually over the previous 9 month contract.
7. Objective: Reduce class size
   Criterion: Class size should be reduced by at least 2-3 students per class compared with the traditional program class size.

How the Schools Have Fared

Achievement Scores

Within all of the schools there may be at least two levels of effects: the first at the school-wide level where all students' achievement may be affected by the changes in curriculum and structure that have affected the whole school; and the second level where the most "at-risk" students have received special interventions through the intersession program. However, because each school has a different population and has responded to the needs of children differently, analyses have been tailored to the specifics of the sites.

Tweeter

At Tweeter, the entire school population was perceived to be "at risk". Analyses of gains between 1989 and 1990 of a matched sample of students in grades 2-6 at Tweeter and its comparison school show that Tweeter outperformed its comparison school overall (math and reading scores combined) at a level of $p=<.05$. The greatest contribution to this effect was the math scores.

A separate analysis was conducted of students who had participated in the intersession program. These students were compared to other students in the school who had not participated in program. In an ANOVA, no significant effects were found for program participation.

Palm Avenue

In an ANOVA test of reading and math scores, by grade level, between Palm Avenue and its comparison school, no significant effects were found at the school-wide level. However, analyses of matched scores of Chapter One children in grades 2-6 showed significant gains for the Palm Avenue School ($p=< .01$ in reading, $n= 81$; $p=< .0001$ in math, $n=49$).

Brady School

There were no significant overall differences between Brady School and its comparison school in a two-tailed ANOVA of reading and math scores in grades 2-6. However, analyses are continuing for matched samples of Chapter One and LEP students where data suggest differences do exist, but high transciency has eroded faith in the existing data.

Hiawatha School

Hiawatha School, its comparison school, and the entire district, suffered significant losses in standardized scores (CTBS) in the 1990 test year. Dramatic drops in scores were noted across schools. This, of course, raises serious questions about the data. Nonetheless, no significant differences were found between the schools, on a consistent basis, on either reading or math. Because the intersession

had never been fully implemented, further analyses were not conducated.

Pupil and Teacher Absentee Rates

Except in one school (Tweeter), student absentee rates declined, if only slightly, across the schools (see Table 1). This is consistent with the literature on student absenteeism in year round schools (Quinlan, et al., 1987).

Teacher absences, however, did increase between .6 and 1.8 percentage points in all four schools. It would appear that with the longer contract year teachers were either getting sick a little more frequently or accomodating personal needs more often by being absent from school. The pattern of absences is interesting to observe as well (see Table 2). The highest rise in absentee rates of teachers occurred in the school with the overall lowest level of teacher satisfaction (Hiawatha), and the second highest rate was in the school with the highest percent of baseline absences (Brady), suggesting that something operating in that school or community probably contributed to higher levels of absence. The lowest increase in teacher absences occurred in the school with the highest overall level of implementation of the program. The data thus suggest that teacher absenteeism is probably related to staff morale and in-school factors which may or may not be related to the specifics of the experimental program.

Parent Satisfaction

Each school designed and distributed its own anonymous parent survey to ascertain parent attitudes toward the program. In all cases, surveys were sent to all parents; return rates ranged from 43 to 66 percent. All schools reported that a majority of parents were satisfied with the Orchard Plan.

An additional way that parents express their satisfaction or dissatisfaction with a program is with their

feet. Acknowledging that this is less of an option for lower income families, nonetheless, across all of the schools, no more than two families requested transfers to other schools when the Orchard program came into effect.

Hiawatha

The survey at Hiawatha was administered toward the end of the first year of operation of the program. With a 66% return rate, 54% of parents reported liking the year round school schedule and 8% had no opinion. 38% had unfavorable opinions. Interestingly, opinions have been changing in this school. Before the program was implemented, during the baseline year, 55% of parents had responded that they did NOT favor the year round schedule and only 26% had rated it favorably. Hence, in one year considerable support from parents has been gained for the program.

Brady

The Brady survey was administered mid-way through the first year of operation and the return rate was approximately 50%. Because Brady School had previously been operating a single-track year round schedule, parents were offered three choices of preference: Orchard Plan, Single Track Year Round, and Traditional. 42% of parents selected Orchard as their preferred program, 29% selected the Single Track Year Round, and 18.5% preferred a Traditional calendar. Ten percent expressed no preference. Additionally, 85% of parents marked that they felt their child(ren) was making satisfactory academic progress and 86% stated that their children were happy with the school this year. In sum, 71% of parents were affirmatively in support of some kind of year round program, with the majority of these parents choosing the Orchard Plan.

Palm Avenue

Palm Avenue likewise administered its parent survey mid-way through the school year. 43% of the parents returned the survey. Of these, 62% stated that they were "very satisfied" and an additional 34% claimed to be

"satisfied" with the program. Only 1% stated that the program "needed improvement."

Tweeter School

The majority of parents surveyed mid-year in Tweeter reported being satisfied with the program. (These data are still being forwarded from the school.)

Teacher Satsifaction

Teachers were surveyed in all of the schools, using the same instrument, at the end of the first year of implementation, and again several months into the second year of implementation. The response rate for the first survey was 80% (N=66), with the bulk of the missing surveys coming from the school with the largest number of teachers (Palm Ave). The response rate for the second survey was 96% (N=90), with only four teachers failing to return surveys.

On the question of satisfaction with the program, 68%*[1] stated they were either satisfied or very satisfied with the program, and 14% said they were not satisfied with the program at the end of the first year. By the time the second survey was conducted during the second year of implementation, only one school had suffered teacher losses (2) and 86% of teachers reported being satisfied or very satisfied with the program; 4% were dissatisfied, as in the first survey, almost all of the dissatisfied teachers were at one school (Hiawatha).

Increase in School Capacity

Each of the schools in the experiment increased its student enrollment by 20% except one (Hiawatha) which increased enrollment only by 9%. Hiawatha made an agreement with its district to hold down its enrollment, thereby affecting its class-size as an incentive to teachers who

[1] this is extrapolated from language which actually read "enthusiastic" and "cautiously positive" in the first survey because we were interested in getting an affective indicator at that point. 24% were "enthusiastic" and 21% were "cautiously positive".

were not only taking on the Orchard experiment, but were also providing supervision for 25 interning teachers from the local university.

For the most part the increased enrollment came from students within the schools' boundaries who would otherwise have been diverted to another, less crowded school. In the case of Palm Avenue, which is a magnet school, more students were admitted from throughout the district.

Teacher Salaries

At all schools teachers negotiated contracts that represented the percentage of time by which their work year was increased with the Orchard Plan. This meant that their salaries were increased by between 18 and 21% of their baseline year salary. At the upper end, teachers were making as much as $64,000 per year in 1990. This may account for the fact that when asked, 73% of the teachers would not want to consider reverting to a 9 month contract with a 9 month salary.

Class Size

Although Orchard Plan teachers carry more children on their rolls than do traditional teachers, all schools reduced the average number of pupils in the classroom at any one time. The average reduction of students per classroom across the schools was 3.35, with a range of 1.4 to 4.5 (See Table 3). The class size issue is a particularly acute for California with its overcrowded classrooms. Teachers consistently report that it is their number one issue in contract negotiations. Interestingly, however, there is no correspondence between overall level of satisfaction with the program and reduction in class size by school (see Table 4).

Lessons Learned

Overall, with only one year's post-implementation data, the experiment has been quite successful. For the most part teachers and parents are happy. (We also have a considerable amount of data on children's attitudes which has not been reported here, but which suggests that the students like the program.) Overall achievement scores have not dropped when compared to other schools in the same district, and there are indications that a number of areas of academic performance have, in fact, been enhanced. This is encouraging particularly in light of the fact that other studies have suggested that achievement effects may not be seen from such a program for as long as four years (Shepard & Baker, 1977). This has all been accomplished with an increase in school capacity and a small reduction in class size.

There are indications, however, that a number of aspects of the program might well be rethought. Intersessions appear to be spectacular successes where the schools have been able to implement them. However, the channeling of monies to intersessions was more complicated than we initially thought it would be. Many principals do not have as much control over their own budgets as we had hoped and assumed. Space problems continue to plague some of the schools. Intersessions also take alot of planning time; it may work best in larger schools where there are more staff to contribute to this planning.

The kinds of teachers who opt into such an experiment as this tend to be high-energy, go-getters. Extended work contracts are certainly not for everyone, and it is difficult to know for what percentage of the teachers they would be a reasonable option. Approximately one-fourth of our teachers say they would like to return to a shorter contract (not necessary a standard 9 month, but something other than 11 month) in the future. One of the principals comments that she doubts that all of the teachers who say this would actually pick up the option if it were offered,

but that remains to be seen. Teachers probably should be offered the possibility of working different length contracts and an 11 month school offers more possibilities toward this end than a 9 month school. In any case, we have come to think that teachers should have a choice from year to year to renegotiate this.

Our findings are consistent with the literature on year round with respect to teacher and parent satisfaction. The more exposure people have to year round (or extended year), the more satsified they appear to be with it. In communities that are adequately prepared for it, and where parents have a say in how it is conducted, the majority of parents will support it over the traditional calendar. It provides more options for people.

Attempting to tie changes in student achievement scores to a particular intervention is always difficult. There are simply too many uncontrolled variables in any school. It is doubly difficult in schools with high rates of transciency. We expect to lose two-thirds of our initial student population in three of the four schools by the end of the second year of implementation. The very students we are targetting for intervention are the least likely to remain in the school or return for the intersession program during breaks. In some cases this may leave us with looking only at school-wide effects, in schools that are as dynamic as their surrounding populations. In California whole school communities can change radically in the period of two years--one immigrant group moves on as another comes in.

One unexpected finding came out of this study which has spurred us on to further investigation. This is the fact that teachers, at all schools, consistently reported the decrease in negative behaviors of children, both inside and outside the classroom, and the increase in "positive roles" for children in the classroom context. As we analyzed the source of these comments we found that teachers were observing a phenomenon of role-sharing among students as a

result of the constant flow of students in and out of the Orchard classrooms. When frictions began to develop and tempers flared, the changing composition of the classroom tended to defuse these situations. Moreover, the acknowledged classroom "stars" also had to exit the classroom for a period of time during their breaks, creating an opportunity for other children to move into the role of "star." Children who had not previously dared to challenge the acknowledged stars, became stars themselves. Children who were more or less chronically in trouble left the classroom, giving themselves and everyone else a break from their negative roles.

We will continue to collect data on these schools over the next year and with three years of data we may find things that have not yet become evident. However, at this point we are reasonably confident of a few conclusions:

1. Year round (or extended year) programs are feasible for many communities, and with increasing expposure and some degree of input into how they are run, parents and teachers are likely to find them quite satisfactory alternatives to traditional calendar schools.
2. Intersession programs can be an important adjunct to the regular school curriculum and may, in fact, provide important help for children who need an additional academic boost or enrichment. However, they probably require considerable support from a variety of sources to mount successfully.
3. Teachers should be given options to contract for different work schedules. Some teachers want to work a longer year for greater remuneration, and schools and districts can benefit both financially and substantively from these teachers' choices.
4. Extended year and year round programs can work to reduce class size by 3 or 4 students without additional cost. However, the degree to which this size of a reduction will affect teacher satisfaction is an open

question. Teachers in California are quite outspoken about the need to reductheir class sizes even by this marginal amount. It may not, however, reap the rewards that they envision.

5. Schools may find that experimentation with a changing classroom dynamic, by whatever means this is achieved, can promote more positive attitudes in the classroom, and expand the number of positive roles available to students. (We hope to be able to report soon on whether this actually affects students' grades.)

REFERENCES

Brown, P. & Haycock, K. (1984). **Excellence for Whom?** Oakland, CA: The Achievement Council, Inc.

Cagampang, H., Garms, W., Greenspan, T. & Guthrie, J. (1985) **Teacher Supply and Demand in California: Is the reserve pool a realistic source of supply?** Unpublished paper, University of California, Berkeley: PACE.

Chase, C. & Kane, M. (1983). **Increasing the Duration and Intensity of Adacdemic Learning Time in Schools.** A report developed by the TAsk Force on Education for Economic Growth, Education Commission of the States, Denver, Colo. ERIC: ED 241 130.

Darling-Hammond, L. (1984). **Beyond the Commission Reports. The Coming Crisis in Teaching.** Santa Monica, CA: RAND Corp. R-3177-RC.

Handleman, J. & Harris, S. (1984). Can summer vacation be detrimental to learning? An empirical look. **Exceptional Child**, 31, 151-157.

Kimbrough, J. & Hill, P., (1983). **Problems of Implementing Multiple Categorical Education Programs.** Santa Monica, CA: RAND Corp. R-2957-ED.

New York State Dept of Education and University of New York. (1978) **Learning, Retention and Forgetting.** Technical Report No. 5. A Report to the Board of Regents of the State of New York. Albany, New York.

Oakes, J. (1985). **Keeping Track.** New Haven: Yale University Press.

Policy Analysis for California Education. (1990). **Conditions of Education 1989.** Berkeley: University of California.

Quinlan, C., et al. (1987). **Year Round Education: Year Round Opportunities. A Study of Year Round Education in California.** Sacramento, CA: California State Dept of Education. ERIC: ED 285 272.

Slavin, R.E. (1983). When does cooperative learning increase student achievement? **Psychological Bulletin**, 94, 429-445.

Shepard, M. & Baker, K. (1977). **Year-Round Schools.** Lexington, MA: Lexington Books.

TABLE 1
STUDENT ABSENCES

	Tweeter	Brady	Hiawatha	Palm
1988-89	7.0%	6.3%	6.6%	8.5%
1989-90	8.0	6.0	6.5	6.39
Diff.	+1.0	- .3	- .1	-2.11

TABLE 2
TEACHER ABSENCES

	Tweeter	Brady	Hiawatha	Palm
1988-89	2.0%	3.7%	2.0%	1.2%
1989-90	3.0	5.5	4.0	1.8
Diff.	+1.0	+2.2	+2.0	+ .6

TABLE 3
TEACHER SATISFACTION

	Tweeter		Brady		Hiawatha		Palm	
	88-89	89-90	88-89	89-90	88-89	89-90	88-89	90
N	6	7	19	19	24	27	17	37
% response	86	100	100	100	80	87	56	100
Very Sat	5	1	7	13	7	5	5	29
Satisfied	1	4	4	6	11	13	5	6
Neutral	0	2	2	0	0	5	3	2
Unsat	0	0	0	0	4	4	3	0
Vry Unsat	0	1	0	1	0	0	0	0

TABLE 4

CLASS SIZE

	Tweeter	Brady	Hiawatha	Palm
1988-89	29.57	30.6	32.0	28.7
1989-90	26.2	26.4	27.5	27.3
Diff.	- 3.3	- 4.2	- 4.5	- 1.4